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# DRAFT MEETING MINUTES WATER POLLUTION CONTROL ADVISORY COUNCIL

# 10:00 am, Friday, May 11, 2018 Metcalf Building

1520 E. Sixth Ave., Helena, MT 59620

### **Council Members Present:**

**Council Members Absent:** 

Earl Salley
Michael Wendland
Adam Sigler (phone)
Craig Workman (phone)
Karen Sanchez (phone, 1st hour only)

Trevor Selch Stevie Neuman

## **Additional Attendees:**

David Bowers – MDEQ Eric Urban – MDEQ Carolina Balliew – MDEQ
Rick Thompson – MDEQ Jenna Stamper – MDEQ Hannah Riedl – MDEQ

Andrew Gorder – Clark Fork Coalition (phone)

#### **Call to Order**

Vice Chair Earl Salley called the meeting to order at 10:05 a.m.

#### Introductions

Introductions of members present and on the phone.

# **Approval of Agenda**

Vice Chair Earl Salley moved to approve the agenda. Motion was approved.

## **Approval of Minutes**

Vice Chair Earl Salley moved to approve the previous meeting's minutes. Motion was approved.

### **Briefing Items**

- Upper Blackfoot Mining Complex (Superfund Site) David Bowers
  - Work in the UBMC was previously discussed with the council in 2006
  - 1890-1950 Mike Horse Mine's Mill operational, exploration in the 1960's-1970's
    - 1975 flood event released 200,000 cy of fine tailings sediment
  - 1993 identified as State Superfund Site
  - 1993-1999 Voluntary reclamation period (Arco/Asarco) included installing a wetland treatment system that ran from 1995 to 2007.
  - In 2000 the Board adopted temporary standards because it was clear the treatment system was unable to meet standards
  - 2002 Asarco was required to setup \$100 Million Trust Fund for entire USA to be used primarily for smelter operations
  - DEQ filed a complaint against Arco/Asarco in 2003 before Asarco filed for bankruptcy in 2005. This strategic move help secure money for clean up because all legal complaints are the first thing to be addressed during bankruptcy.
    - It was also important the temporary standards were revoked in 2006 so that DEQ

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- had leverage to get Asarco to build a treatment plant that could meet standards
- In 2008 a settlement was reached: 8 Million upfront; 23 Million in unsecured claims; 1 Million for Forest Service for oversite of cleanup
- 2007 new water treatment plant designed & constructed for \$4 Million under a separate settlement
  - Additional \$10 Million for operation of plant that became active in 2009
  - 2011-2012 plant optimized by adding an additional cell
- 2013 repository constructed for tailings removals in Beartrap and Mike Horse Creeks
- What the settlement bought us:
  - Removed 700,000 cy of tailings; expected only 500,000 cy initially.
  - Removed highest concentration of contaminants from headwaters (98% of all ore removed out of the UBMC).
  - Groundwater in Mike Horse Creek at the horseshoe bend meets drinking water standards for the first time since 1994. Surface water still exceeds zinc, manganese, cadmium, copper, and lead standards, although human health standards are achieved.
- Current needs
  - Approximately 70% finished with removing 1 million cy of tailings. Remaining
    waste is more diffuse so even though there are less cy remaining, there are more
    linear feet to restore.
  - \$11 Million remaining in budget (\$28 Million spent). The hope is to complete up to the EE/CA boundary before funding runs out.
- o Vice Chair Earl Salley asked: Where do you hope to get funding to complete the project?
  - A: Public sector (non-gov't) and resource development grants

# <u>Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)</u> – Rick Thompson

- Average US Citizen exposed to 360mR/year, and the lethal dose of radiation for humans is 450,000 mR
- NORM = Naturally Occurring Radioactive Materials (trace amounts naturally occurring in the earth)
- TENORM = Technologically Enhanced Naturally Occurring Radioactive Materials may have higher concentrations of radionuclides and higher exposure/dose rates than NORM
- Radioactive Waste = Typically products of nuclear power generation or processes which result in fission or splitting of an atom. States that have regulations from nuclear power generation are called "agreement states." Montana is not an agreement state. Montana has no major sources of nuclear power, but we do have hospitals and other generators low-level radioactive wastes.
- Exposure pathways of TENORM: inhalation, ingestion, or direct exposure; inappropriate disposal such as illegal dumping, recycling of contaminated materials, discharge of liquid materials
  - TENORM most commonly found in recycled material from the oil and gas industry, such as pipes, valves and other items used to move water. The molecular structure of radioactive material associated with TENORM tends to deposit onto the recycled material.
  - Problem in Eastern Montana where drill pipe is being reused as corral fencing.
     Pipe scale can be up to 400 pCi ("fairly hot")
- Councilmember Wendland asked: Over time does the TENORM go away on its own?

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- A: Radium takes almost 1,000 years for it to break down half.
- Councilmember Wendland asked: We know there is radon in the crust, does it get stronger when you go deeper?
  - A: No, in the soil it's trace amounts, and it has a short half-life. Eventually it will irradiate down, but it can still harm you.
- Regulatory framework for solid waste
  - Able to adapt rules under the Solid Waste Management Act
    - Regulatory structure currently involves siting & relocating restrictions; waste groups (TENORM is a group 2 waste); stormwater controls; leachate requirements; robust monitoring; financial assurance the facility can clean up site at any time and monitor for at least 30 years.
    - Goals for TENORM additions to solid waste rules are to adopt TENORMspecific standards to minimize exposure to humans and the environment
- Alternate Councilmember Sigler asked: Did the entity who sold the contaminated drill stem break the law?
  - A: Did he break the law, did he recycle without a license? Yes, but how we will
    deal with that will probably be more of an educational approach to bring that
    person into compliance.
- Councilmember Sigler asked: "That person" being a business that accepts materials from oil and gas industry to repurpose and sell it to the public?
  - A: Yes. We are trying to adapt our rules to deal with all aspect of TENORM waste management, including recycling. It is an area that a lot of people don't know about so the best thing to do is educate first. We hope many stakeholders will want to comment on the proposed rules.
- Councilmember Wendland asked: Would those recyclers have to disclose that that pipe may be (contaminated), is that something you are going to work towards?
  - Yes. One thing we are going to try to make more robust and more easily understood is waste screening and acceptance criteria; so that folks that hope to recycle will know that they need to be careful of exposure.

#### **Public Comments**

No comments

#### Agenda Items for Upcoming Meeting on July 13, 2018

- 1) Vice Chair Salley requested via Councilmember Sanchez a briefing item from to clarify: whether the General Variance to numeric nutrient standards applies to all MPDES holders. If not all, which permits does it apply to and which permits does it not apply to? The reason for this request is that Karen was contacted by an engineer whose client has a lagoon for its wastewater treatment. This engineer has had conversations with DEQ and has learned that the facility may not be eligible to apply for the General Variance.
  - Councilmember Workmen agreed: Yes, with the pace that the circular has been changing and updating, I agree that's a good briefing item.
  - Riedl said there is a Belt Abandoned Mines update schedule for the next meeting where Chairman Selch will present biological sampling and Tom Henderson will provide an update on water treatment

## **Meeting Adjourned**

Meeting adjourned at 11:10 AM